



Honda CBR 1000 RR (2004)

Racing & Evolution Exhaust System

# Akrapovic Racing & Evolution Exhaust System

for the Honda CBR 1000 RR (2004)

The Akrapovic RACING and EVOLUTION exhaust systems are the top of our product range. They are designed for Supersport fans who enjoy pushing the engine right to the top of the range. Their quality and reputation are further augmented by the use of the high-tech HYDROFORMING production process to form the header tubes. This process is a highly regarded innovation in the field of exhaust systems, which Akrapovic is introducing this year. Through changing the shape of the header tubes we have achieved better flow of the exhaust gases than was possible in the past. The American company Dynojet offers a Power Commander for the Honda CBR 1000 RR with mapping developed specifically for this Akrapovic system. The mapping will add a further power increase and extend the lifetime of the damping material.

## PERFORMANCE

Measurements of the Akrapovic EVOLUTION system on the HONDA CBR 1000 RR:

Power: the performance measurements on the Honda's engine immediately reflect the change of the exhaust system. Max. power of 158.8 HP was measured at 11800 rpm, right at the top of the range, where the stock curve is already fading. However, the power increase with the Akrapovic EVOLUTION (Racing) system covers more than just the high end; the increase is visible from 4400 rpm on.

Torque: the torque curve also benefits from a major boost with the help of the Akrapovic exhaust system. Similar to the power curve, the increase begins at 4400 rpm, and extends right to the top of the rpm range. Below that level the torque output is the same as the stock curve, but with a slight time delay. The same occurs with the power curve.

## CONFIGURATION

The Akrapovic RACING and EVOLUTION systems for the Honda CBR 1000 RR are a 4-2-1 configuration, while the systems differ only in their selection of materials. The RACING system uses stainless steel, while the EVOLUTION system uses titanium. The systems are designed with two conical link pipes, an independent Y-shape and a standard one which is welded to the muffler. The system features header tubes formed using hydroforming technology, while all of the remaining parts are composed of conical elements. The individual parts of the system are connected using free-floating joints secured with silicon-shielded tensioning springs, except for the welded link pipe  $\varnothing$  muffler joint. The muffler is oval and lies flat, and is available with either a carbon-fiber or titanium outer sleeve. The interior, input and end rosettes are made entirely of titanium. The muffler is secured to the bike using an Akrapovic carbon-fiber clamp. The systems also include carbon-fiber heat shields.

## OPTIONS

The systems are available with either a carbon-fiber or titanium muffler outer sleeve.

Product code: 102720 (S-H10R4L-TC), 102721 (S-H10R4L-TT)  
102687 (S-H10RFT4TL-TC), 102688 (S-H10RFT4TL-TT)

	PERFORMANCE		
	stock	AKRAPOVIC	max. increased power
max. rear wheel power HP / rpm (measured on SuperFlow Cycle Dyn)	151.1 / 11200	158.8 / 11800	10.8 / 11800

	CONFIGURATION			
	header tubes	collector	INDEPENDENT link pipe	link pipe
material	TITANIUM (Evolution) STAINLESS STEEL (Racing)	TITANIUM (Evolution) STAINLESS STEEL (Racing)	TITANIUM (Evolution) STAINLESS STEEL (Racing)	TITANIUM (Evolution) TITANIUM (Racing)
tube shape	HYDROFORMING CONICAL	CYLINDRICAL	CONICAL	CONICAL

interference crossover tubes	NO	lambda sensor	YES
header tube inner sleeves	S.S. CNC MACHINED	header tube flanges	ALU CNC MACHINED
header tubes - collector connection	FREE-FLOATING + SILICON SHIELDED SPRING	collector / header tube - link pipe connection	FREE-FLOATING + SILICON SHIELDED SPRING
link pipe - muffler connection	WELDED	muffler inlet cap / outlet cap	TITANIUM / TITANIUM
muffler metal interior	TITANIUM	muffler outer sleeve	TITANIUM / CARBON-FIBER
muffler clamp	CARBON-FIBER ROAD	muffler bracket	-
noise damper	-	heat shield	CARBON-FIBER

OPTIONS				
link pipe	noise damper	muffler outer sleeve	muffler bracket	heat shield
-	-	TITANIUM / CARBON-FIBER	-	-

	ADDITIONAL DATA				
	stock	AKRAPOVIC		difference	
		RACING	EVOLUTION	stock - RACING	stock - EVO
weight comparison (kg)	10.6	5.27	4.49	5.33	6.11

noise measurements (dB / rpm)	stock 93 / 5625	AKRAPOVIC 100.7 / 5625
possibility of periodic service without removing A.E.S.	oil YES	oil filter YES
legal for street use	NO	

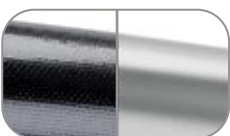
Technical specifications of Akrapovic exhaust systems and related products subject to change without notice.

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for the Honda CBR 1000 RR (2004)



CARBON-FIBER  
MUFFLER CLAMP



The outer sleeve is available in carbon-fiber or titanium



The header tubes are made of stainless steel (Racing Line) or titanium (Evolution Line)



ANTI-SEIZING GREASE



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Road  
Program

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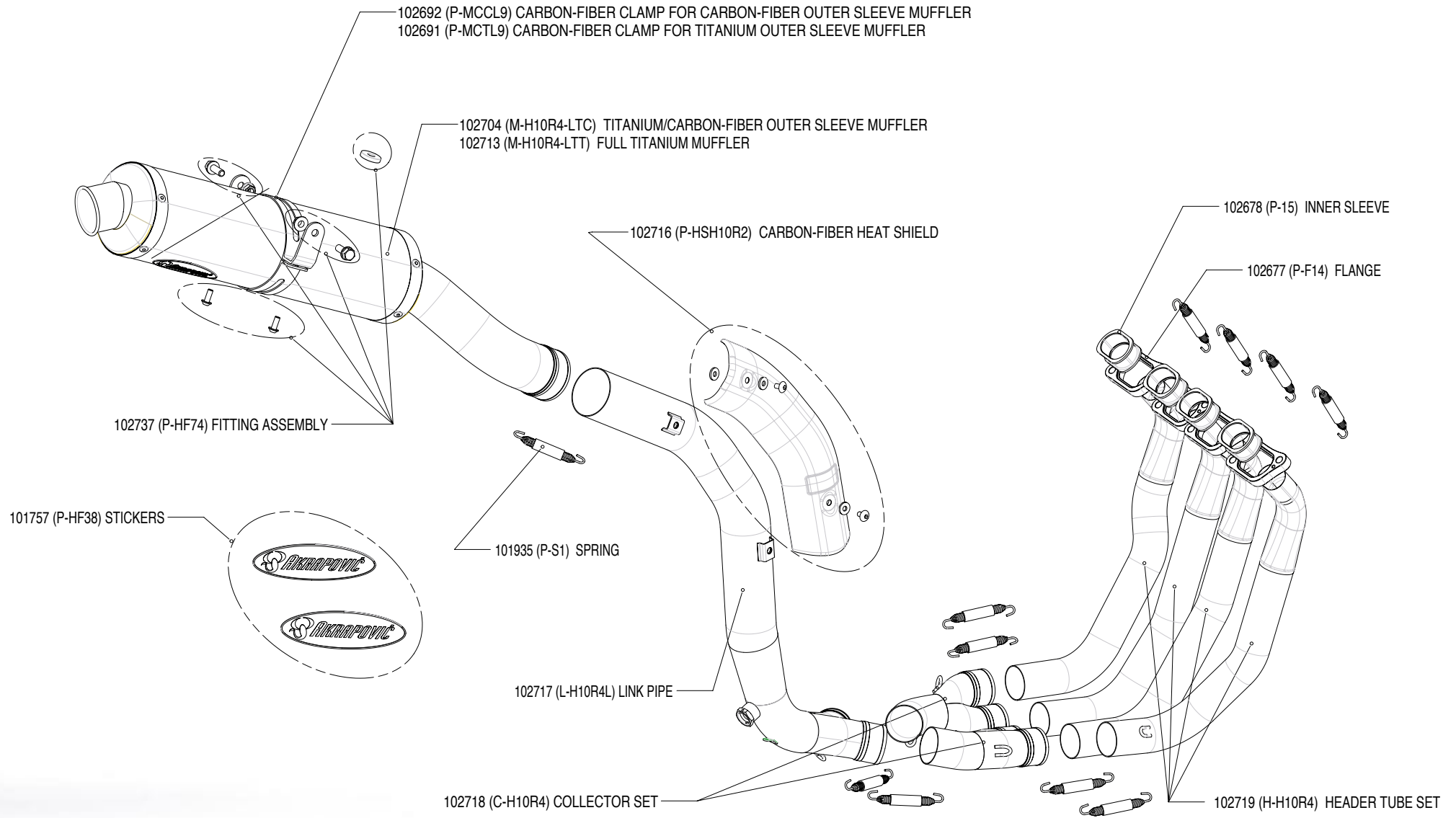
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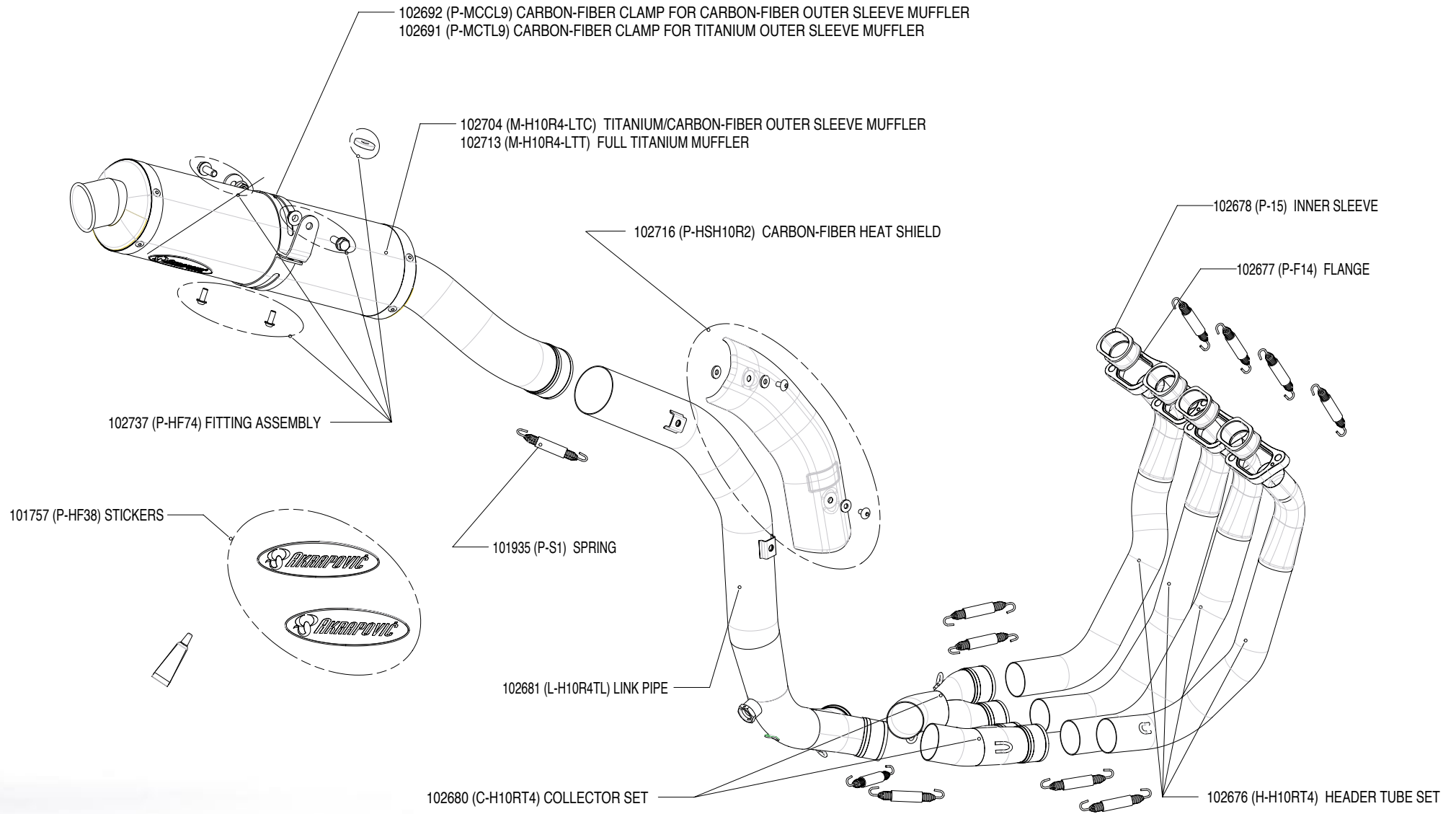
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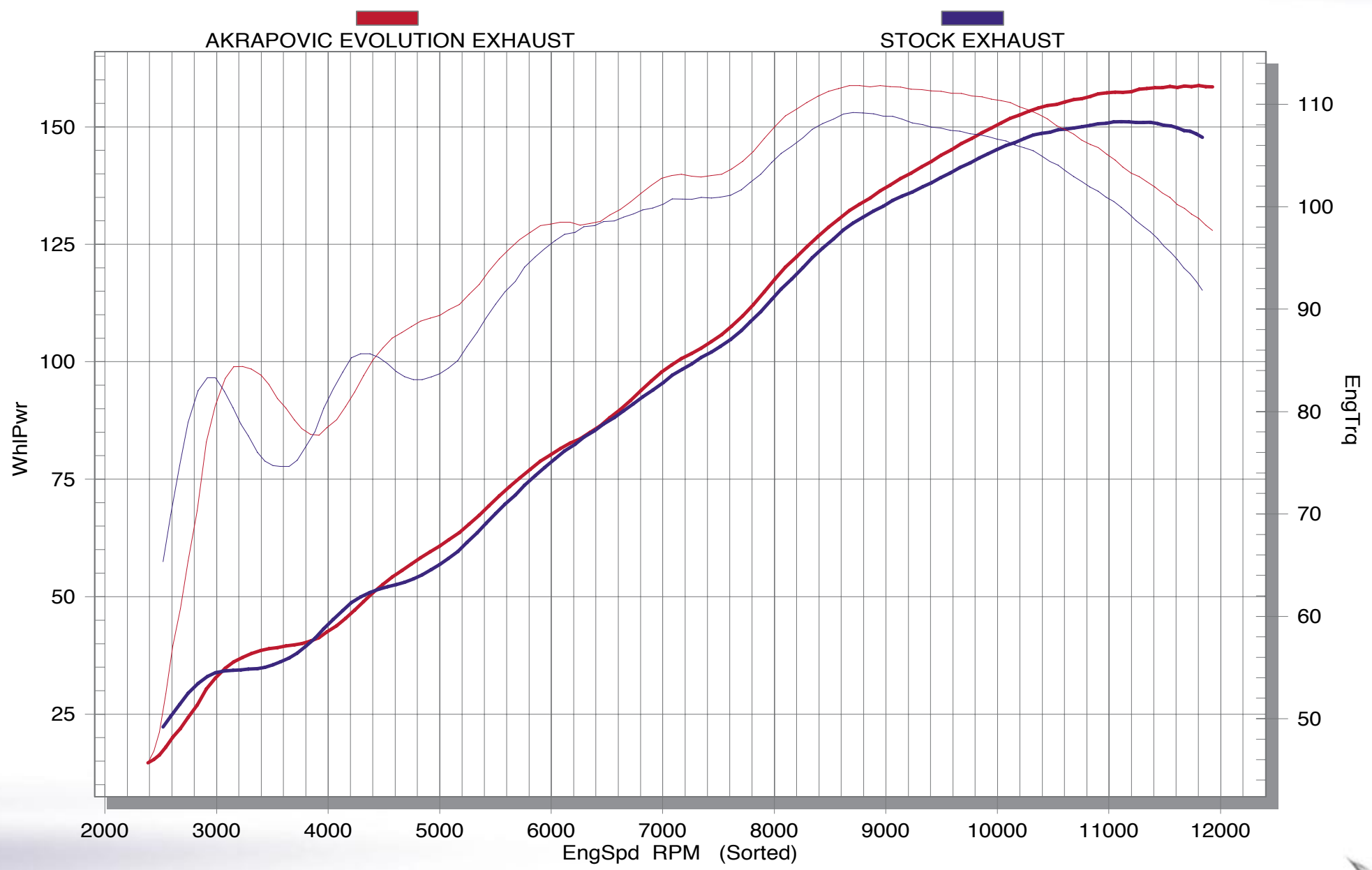
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